

Climate change threat package

Sector specific 1 – Natural Systems

This climate change threat package memo has been designed to address the Mekong ARCC Task 2 Natural System team's request for extra climate threat information, namely:

1. How many **days of rainfall** in a normal year, and in a dry year for both baseline and with climate change.
2. The **total annual rainfall range** (mean, max and min) now and with climate change.

This information will be used for the species vulnerability assessment of Cardamon which is found in Mondul Kiri, Gia Lai, Chiang Rai and Khammoune. Therefore the additional analysis has been completed for the following sites:

- Mondul Kiri East
- Mondul Kiri Upland
- Gia Lai
- Chiang Rai East
- Chiang Rai West
- Khammoune.

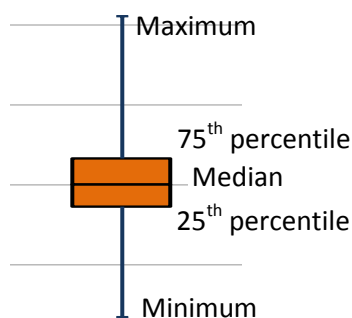
Definitions

Dry year: A dry year is a year with a total annual rainfall of less than the 25th percentile of the 25 year dataset.

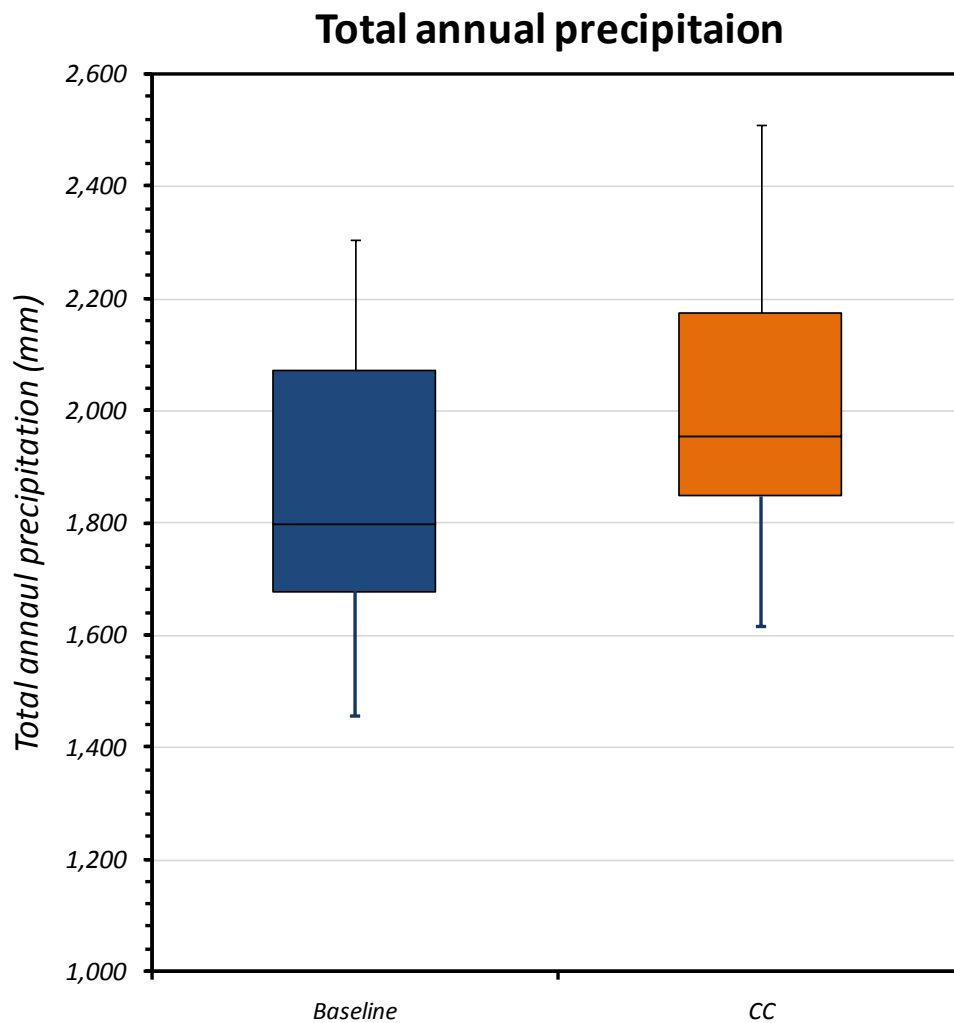
Normal year: A normal year is a year with a total annual rainfall of more than the 25th percentile of the 25 year dataset.

Legend

Note that the box and whisker graphs represent the following statistics:



Mondul Kiri East



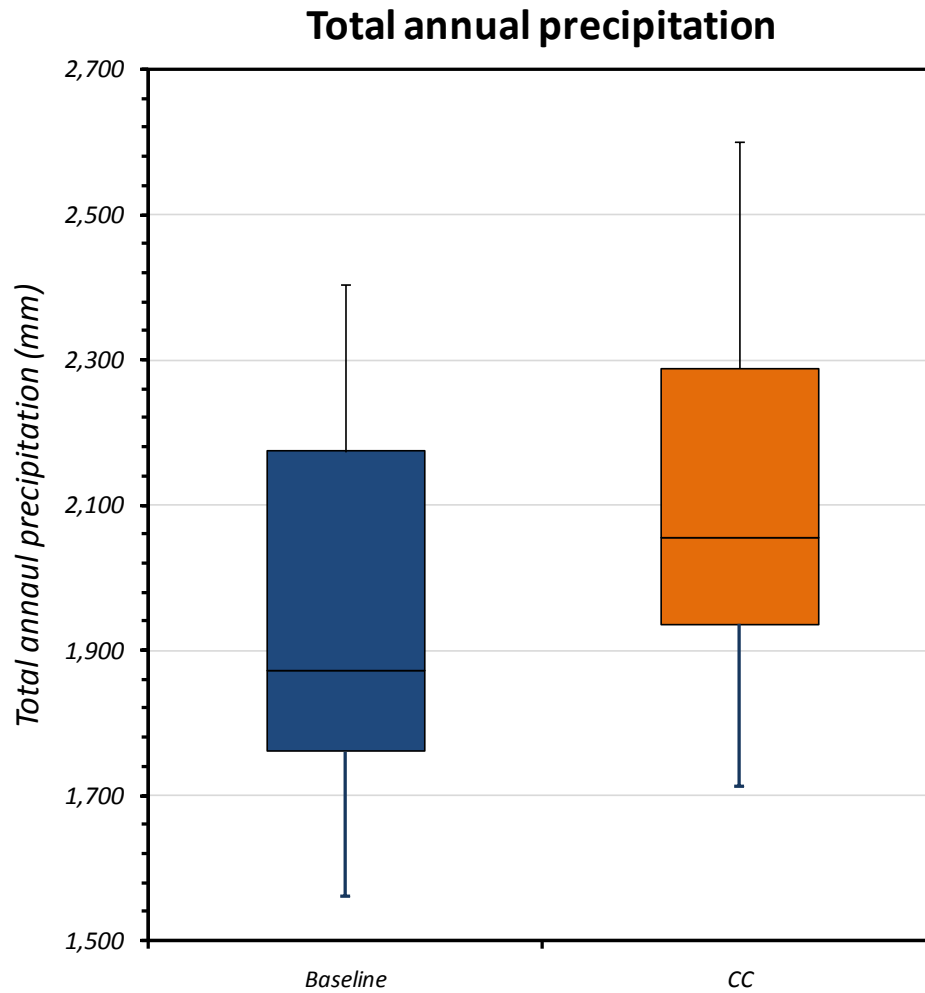
Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,455	1,858	2,305
CC	1,614	2,019	2,511

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	238.6	232.3
CC	238.8	232.7

Mondul Kiri Upland

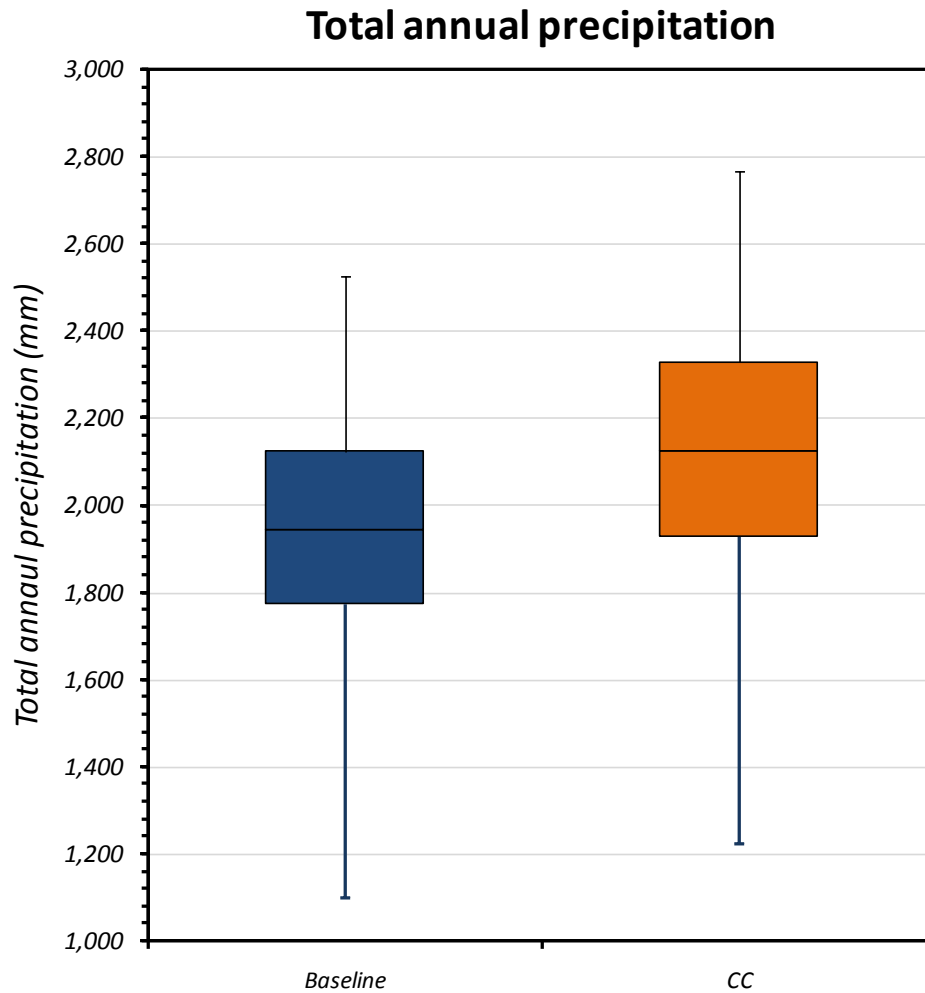


Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,561	1,947	2,405
CC	1,712	2,116	2,601

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	238.1	234.2
CC	238.8	232.7



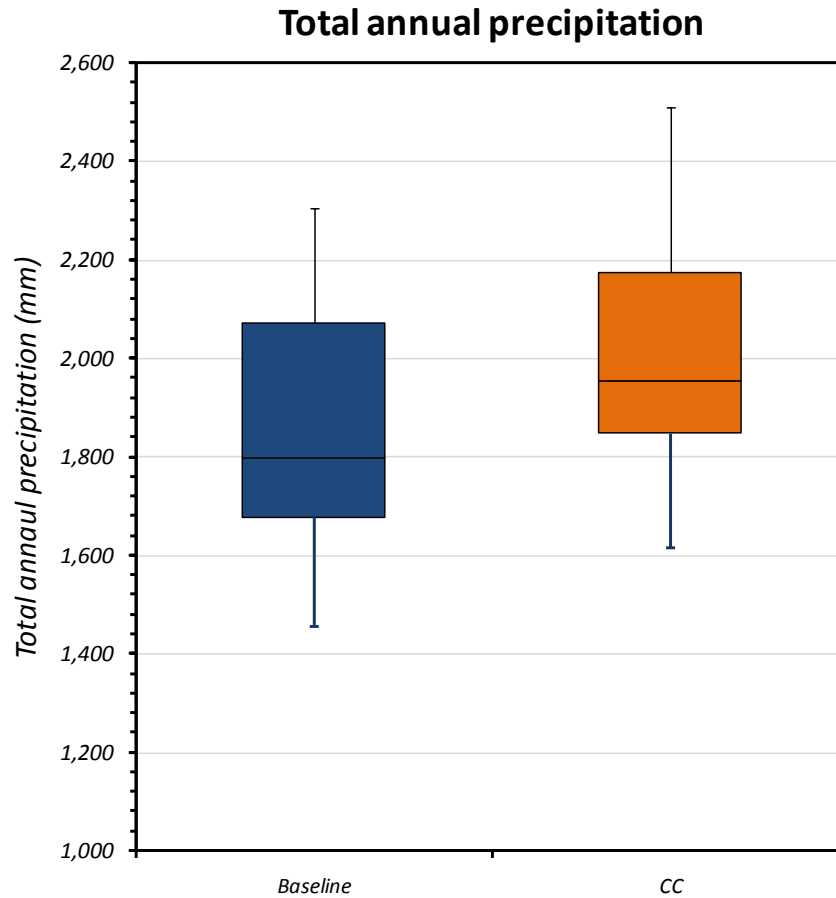
Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,099	1,946	2,527
CC	1,221	2,111	2,766

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	205.2	178.7
CC	205.6	177.2

Chiang Rai East



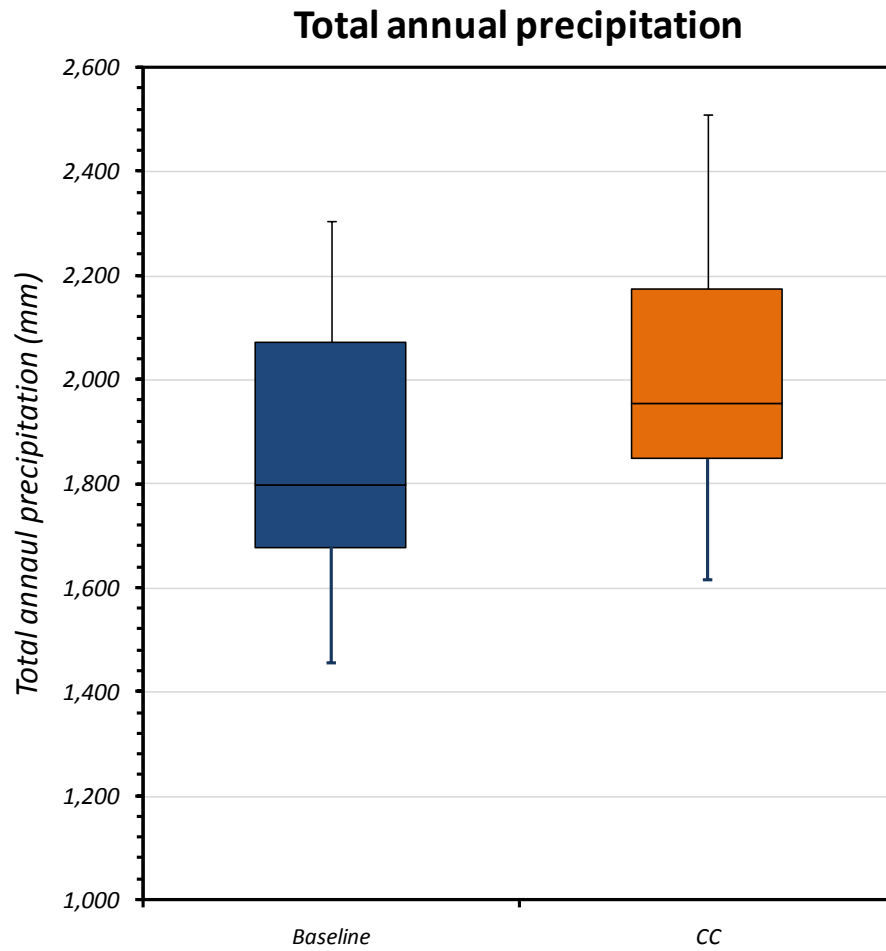
Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,156	1,600	1,977
CC	1,231	1,738	2,151

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	160.4	149.7
CC	160.4	149.8

Chiang Rai West



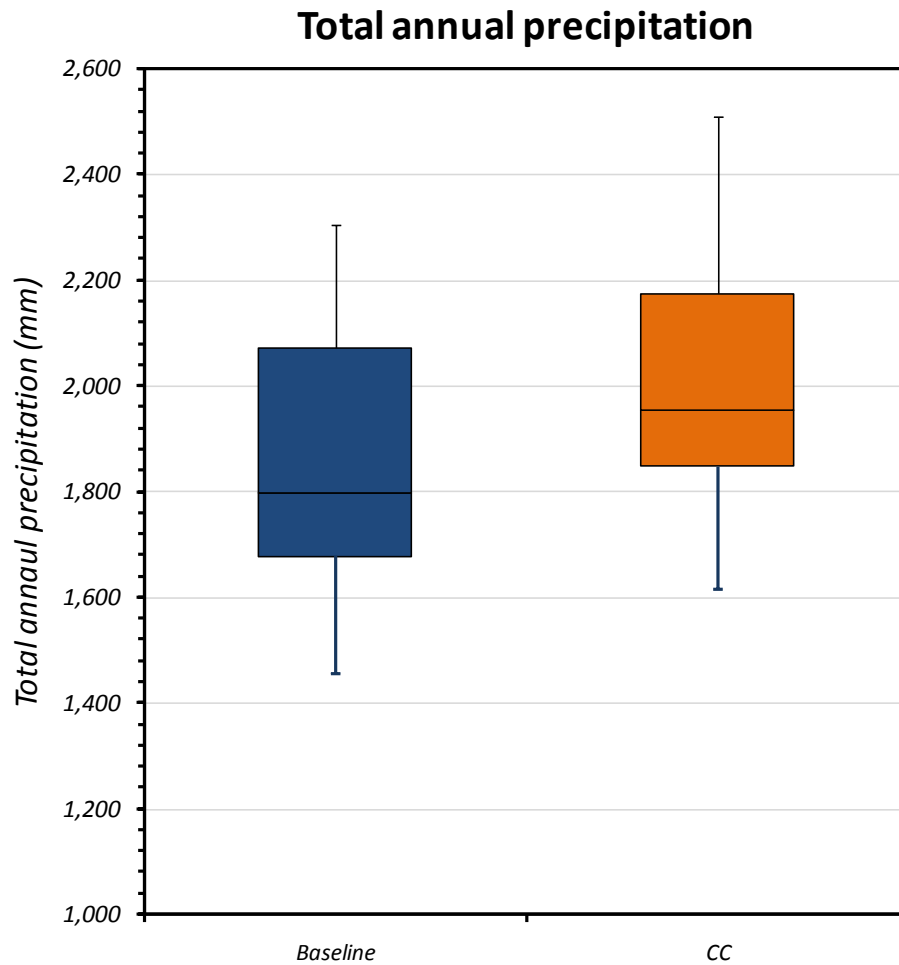
Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,053	1,423	1,819
CC	1,139	1,564	2,013

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	165.1	158.3
CC	164.9	159.0

Khammoune



Total annual precipitation (minimum, average, maximum)

Total annual precipitation			
	Min	Average	Max
Baseline	1,965	2,612	3,496
CC	2,170	2,944	3,910

Number of days of rainfall in normal years and dry years

Average number of days of precipitation		
	Normal year	Dry year
Baseline	172.1	152.3
CC	172.2	152.3